Oklahoma **Grade 5**
Content Standards

FlyBy Math™ Alignment
Priority Academic Student Skills
Mathematics Content Standards

Standard 1: Patterns and Algebraic Reasoning - The student will use algebraic methods to describe patterns and solve problems in a variety of contexts.

Skills	*FlyBy Math*™ Activities
1. Describe rules that produce patterns found in tables, graphs, and models, and use variables (e.g., boxes, letters, pawns, number cubes, or other symbols) to solve problems or to describe general rules in algebraic expression or equation form.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios. --Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.
2. Use algebraic problem-solving techniques (e.g., use a balance to model an equation and show how subtracting a number from one side requires subtracting the same amount from the other side) to solve problems.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

Standard 4: Geometry and Measurement - The student will apply geometric properties and relationships and use measurements within the metric and customary systems to solve problems in a variety of contexts.

Skills	*FlyBy Math*™ Activities
4. Use the appropriate units and tools to estimate and measure temperature, distance, length, weight, and angles.	--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.

Standard 5: Data Analysis and Probability - The student will use data analysis, statistics and probability to interpret data in a variety of contexts.

Skills	*FlyBy Math*™ Activities
1. Data Analysis a. Analyze data to create and interpret tables and graphs. b. Justify the selection of the type of table or graph (e.g., a line graph may be more appropriate than a bar graph when displaying the height of a person over time). c. Compare and translate between displays of data (e.g., multiple sets of data on the same graph, Venn diagrams, a combination of diagrams, charts, tables, graphs). d. Formulate questions, design investigations, consider samples, and collect, organize, and analyze data using observation, measurement, surveys, or experiments (e.g., how far can 5th graders throw a softball based on where it first hits the ground?).	--Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs. --Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes. --Conduct simulation and measurement for several aircraft conflict problems.